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# Cardiovascular Disease

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## PREVIOUSLY HAD A HEART ATTACK

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you had a heart attack, also called a myocardial infarction?”

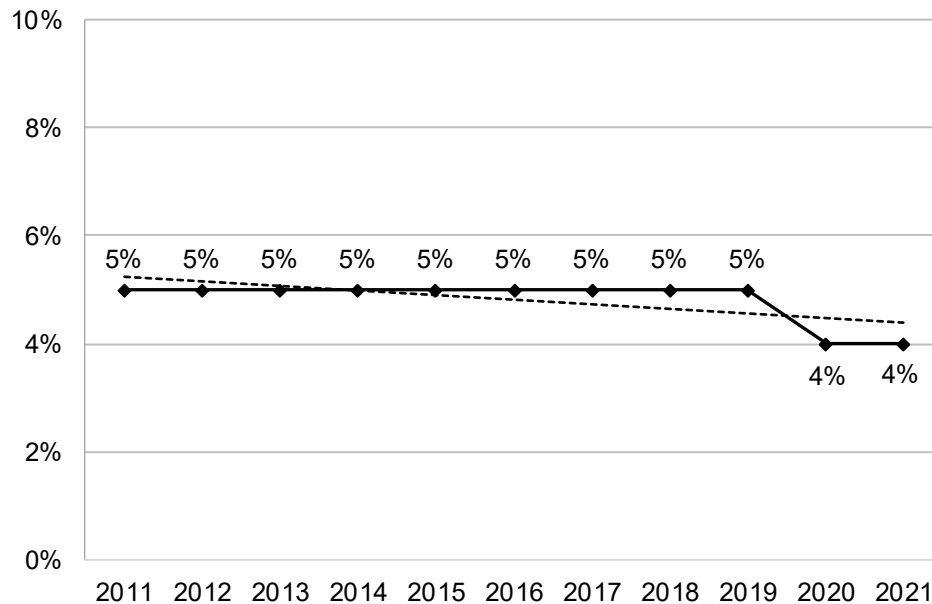
### Prevalence of Previous Heart Attack

- South Dakota 4%
- Nationwide median 4%

### Trend Analysis

Overall, the percent of South Dakotans who have been told they have ever had a heart attack has remained steady since 2011. In more recent years this percent has dropped to four percent. South Dakota is the same as the nationwide median.

**Figure 27**  
**Percentage of South Dakotans Who Previously Had a Heart Attack, 2011-2021**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

**Table 25**  
**South Dakotans Who Previously Had a Heart Attack, 2017-2021**

		2017-2021	95% Confidence Interval	
			Low	High
<b>Gender</b>	Male	6%	5.6%	7.0%
	Female	3%	2.7%	3.5%
<b>Age</b>	18-29	1%	0.5%	1.6%
	30-39	1%	0.6%	1.5%
	40-49	3%	1.7%	4.1%
	50-59	4%	3.5%	5.6%
	60-69	8%	6.5%	8.9%
	70-79	12%	10.5%	14.1%
	80+	14%	11.5%	16.8%
<b>Race/ Ethnicity</b>	White, Non-Hispanic	5%	4.2%	5.1%
	American Indian, Non-Hispanic	7%	5.2%	9.2%
	American Indian/White, Non-Hispanic	2%	1.0%	5.4%
	Hispanic	4%	2.0%	8.5%
<b>Household Income</b>	Less than \$35,000	6%	5.6%	7.4%
	\$35,000-\$74,999	5%	3.9%	5.5%
	\$75,000+	3%	2.3%	3.8%
<b>Education</b>	Less than High School, G.E.D.	7%	5.1%	9.2%
	High School, G.E.D.	6%	4.9%	6.7%
	Some Post-High School	4%	3.7%	5.1%
	College Graduate	3%	2.6%	3.6%
<b>Employment Status</b>	Employed for Wages	3%	2.1%	3.0%
	Self-employed	3%	2.4%	4.9%
	Unemployed	3%	2.2%	5.4%
	Homemaker	4%	2.1%	6.8%
	Student	0.3%	0.1%	1.2%
	Retired	11%	10.0%	12.5%
	Unable to Work	12%	9.0%	14.7%
<b>Marital Status</b>	Married/Unmarried Couple	5%	4.4%	5.7%
	Divorced/Separated	6%	4.8%	7.3%
	Widowed	10%	8.6%	12.2%
	Never Married	2%	1.2%	2.1%
<b>Home Ownership Status</b>	Own Home	5%	4.6%	5.6%
	Rent Home	4%	3.1%	4.7%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.6%	1.6%
	No Children in Household (Ages 18-44)	1%	0.4%	1.2%
<b>Phone Status</b>	Landline	7%	6.0%	7.5%
	Cell Phone	4%	3.5%	4.5%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0%	0.0%	1.6%
	Not Pregnant (Ages 18-44)	1%	0.4%	1.4%
<b>County</b>	Minnehaha	4%	3.3%	5.0%
	Pennington	5%	3.7%	5.5%
	Lincoln	4%	2.2%	7.0%
	Brown	4%	3.4%	5.1%
	Brookings	3%	2.2%	3.8%
	Codington	5%	4.1%	6.5%
	Meade	4%	3.0%	5.6%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021

## **Demographics**

<b>Gender</b>	Males exhibit a significantly higher prevalence of a previous heart attack than females.
<b>Age</b>	The prevalence of a previous heart attack increases as age increases with significant increases as the 40s, 60s, and 70s are reached.
<b>Race/ Ethnicity</b>	American Indians demonstrate a very high prevalence of a previous heart attack, while whites show a very low prevalence.
<b>Household Income</b>	The prevalence of a previous heart attack decreases as household income increases. This includes significant decreases as the \$35,000-\$74,999 and \$75,000+ household income levels are reached.
<b>Education</b>	The prevalence of a previous heart attack decreases as education levels increase. This includes a significant decrease as the college graduate level is reached.
<b>Employment</b>	Those who are retired or unable to work demonstrate a very high prevalence of a previous heart attack, while those who are students show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of a previous heart attack while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	The prevalence of a previous heart attack does not seem to differ based on home ownership status.
<b>Children Status</b>	The prevalence of a previous heart attack among adults does not seem to differ based on the presence of children in the household.
<b>Phone Status</b>	Those who primarily use a landline phone show a significantly higher prevalence of a previous heart attack than those who primarily use a cell phone.
<b>Pregnancy Status</b>	The prevalence of a previous heart attack does not seem to differ based on pregnancy status.
<b>County</b>	Residents of Codrington county demonstrate a very high prevalence of a previous heart attack, while residents of Brookings county show a very low prevalence.

## **ANGINA OR CORONARY HEART DISEASE**

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you have angina or coronary heart disease?”

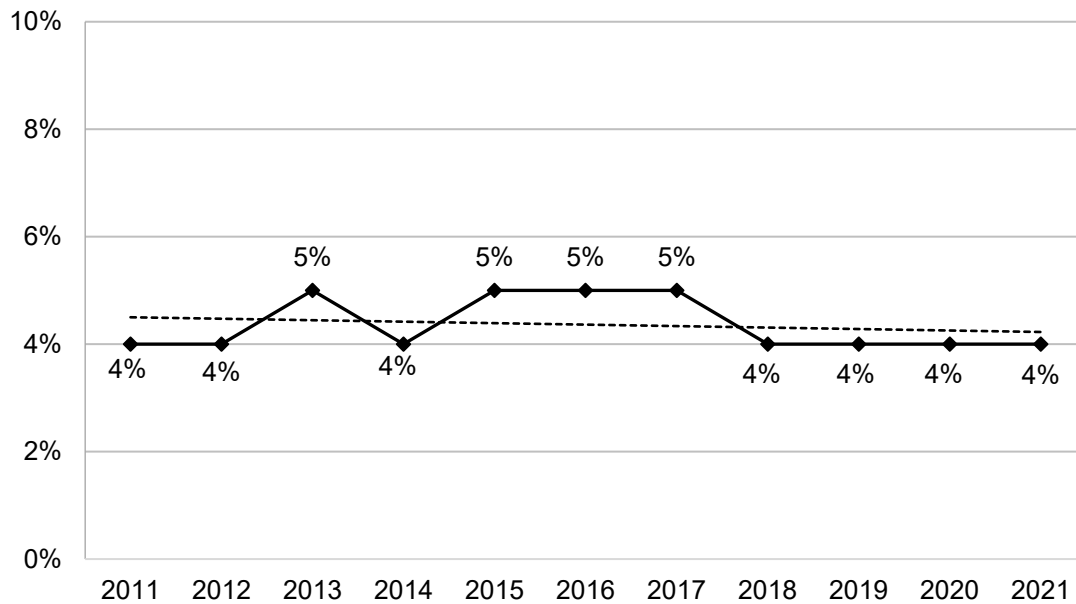
### **Prevalence of Angina or Coronary Heart Disease**

- South Dakota 4%
- Nationwide median 4%

### **Trend Analysis**

Overall, the percent of South Dakotans who have been told they have angina or coronary heart disease has remained steady since 2011. In recent years this has been at four percent. South Dakota is the same as the nationwide median.

**Figure 28**  
**Percentage of South Dakotans Who Have Angina or Coronary Heart Disease, 2011-2021**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

**Table 26**  
**South Dakotans Who Have Angina or Coronary Heart Disease, 2017-2021**

		2017-2021	95% Confidence Interval	
			Low	High
<b>Gender</b>	Male	6%	5.0%	6.4%
	Female	3%	2.8%	3.6%
<b>Age</b>	18-29	1%	0.3%	1.0%
	30-39	0.4%	0.2%	0.8%
	40-49	2%	1.0%	3.1%
	50-59	5%	3.5%	5.7%
	60-69	8%	6.4%	9.0%
	70-79	13%	11.4%	15.0%
	80+	13%	11.0%	15.9%
<b>Race/ Ethnicity</b>	White, Non-Hispanic	5%	4.1%	5.0%
	American Indian, Non-Hispanic	5%	3.3%	7.3%
	American Indian/White, Non-Hispanic	2%	0.9%	4.7%
	Hispanic	3%	1.5%	5.7%
<b>Household Income</b>	Less than \$35,000	6%	5.0%	6.9%
	\$35,000-\$74,999	4%	3.8%	5.3%
	\$75,000+	3%	2.5%	3.9%
<b>Education</b>	Less than High School, G.E.D.	5%	3.5%	7.2%
	High School, G.E.D.	6%	4.9%	6.7%
	Some Post-High School	4%	3.2%	4.4%
	College Graduate	4%	3.0%	4.2%
<b>Employment Status</b>	Employed for Wages	2%	1.6%	2.4%
	Self-employed	3%	2.3%	4.9%
	Unemployed	3%	1.5%	5.8%
	Homemaker	3%	1.6%	4.7%
	Student	0.04%	0.0%	0.3%
	Retired	12%	10.8%	13.3%
	Unable to Work	10%	7.2%	13.9%
<b>Marital Status</b>	Married/Unmarried Couple	5%	4.1%	5.2%
	Divorced/Separated	6%	4.7%	7.3%
	Widowed	10%	8.8%	12.3%
	Never Married	2%	1.0%	2.2%
<b>Home Ownership Status</b>	Own Home	5%	4.6%	5.6%
	Rent Home	3%	2.5%	4.0%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.3%	1.0%
	No Children in Household (Ages 18-44)	0.3%	0.2%	0.7%
<b>Phone Status</b>	Landline	7%	6.2%	7.8%
	Cell Phone	4%	3.1%	4.0%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0.1%	0.0%	0.5%
	Not Pregnant (Ages 18-44)	0.5%	0.3%	0.9%
<b>County</b>	Minnehaha	4%	3.2%	4.9%
	Pennington	5%	3.8%	5.6%
	Lincoln	3%	2.0%	4.6%
	Brown	4%	3.2%	5.3%
	Brookings	2%	1.7%	2.7%
	Codington	4%	3.3%	5.0%
	Meade	3%	2.4%	4.6%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021

## **Demographics**

<b>Gender</b>	Males exhibit a significantly higher prevalence of heart disease than females.
<b>Age</b>	The prevalence of heart disease generally increases as age increases with significant increases as the 40s, 50s, 60s, and 70s are reached.
<b>Race/ Ethnicity</b>	The prevalence of heart disease does not seem to differ based on race/ethnicity.
<b>Household Income</b>	The prevalence of heart disease decreases as household income increases.
<b>Education</b>	The prevalence of heart disease does not seem to consistently change as education levels increase.
<b>Employment</b>	Those who are retired or unable to work demonstrate a very high prevalence of heart disease, while those who are students show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of heart disease, while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	Those who own their home demonstrate a significantly higher prevalence of heart disease than those who rent their home.
<b>Children Status</b>	The prevalence of heart disease among adults does not seem to differ based on the presence of children in the household.
<b>Phone Status</b>	Those who primarily use a landline phone show a significantly higher prevalence of heart disease than those who primarily use a cell phone.
<b>Pregnancy Status</b>	The prevalence of heart disease does not seem to differ based on pregnancy status.
<b>County</b>	Minnehaha, Pennington, Brown, and Codington counties demonstrate a very high prevalence of heart disease, while Brookings county shows a very low prevalence.

## **PREVIOUSLY HAD A STROKE**

**Definition:** South Dakotans who answered “yes” to the question: “Has a doctor, nurse, or other health professional ever told you that you had a stroke?”

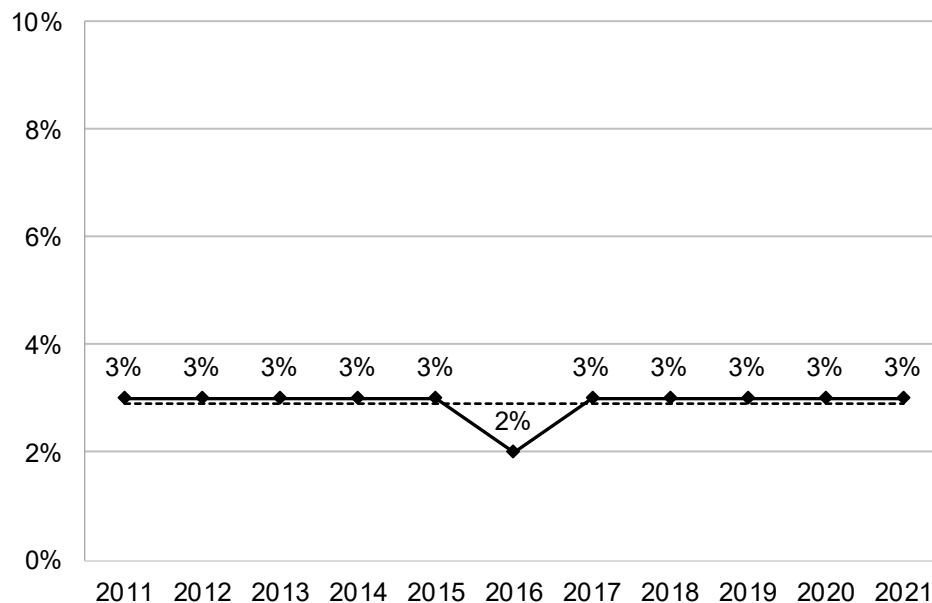
### **Prevalence of Previous Stroke**

- South Dakota 3%
- Nationwide median 3%

### **Trend Analysis**

Overall, the percent of South Dakotans who have been told they have had a stroke has remained steady since 2011. For most of the years surveyed, this has been at three percent. South Dakota is the same as the nationwide median.

**Figure 29**  
**Percentage of South Dakotans Who Have Previously Had a Stroke, 2011-2021**



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2011-2021

**Table 27**  
**South Dakotans Who Previously Had a Stroke, 2017-2021**

		2017-2021	95% Confidence Interval	
			Low	High
<b>Gender</b>	Male	3%	2.4%	3.3%
	Female	3%	2.2%	3.1%
<b>Age</b>	18-29	0.4%	0.2%	0.9%
	30-39	1%	0.4%	1.0%
	40-49	2%	1.0%	2.8%
	50-59	3%	2.1%	4.1%
	60-69	4%	3.2%	5.1%
	70-79	6%	5.2%	7.7%
	80+	9%	7.4%	11.6%
<b>Race/ Ethnicity</b>	White, Non-Hispanic	3%	2.3%	3.0%
	American Indian, Non-Hispanic	4%	3.2%	5.5%
	American Indian/White, Non-Hispanic	1%	0.5%	1.9%
	Hispanic	4%	1.6%	8.0%
<b>Household Income</b>	Less than \$35,000	4%	3.6%	5.3%
	\$35,000-\$74,999	2%	1.3%	2.0%
	\$75,000+	1%	1.1%	2.0%
<b>Education</b>	Less than High School, G.E.D.	5%	3.3%	7.3%
	High School, G.E.D.	3%	2.4%	3.6%
	Some Post-High School	3%	2.1%	3.1%
	College Graduate	2%	1.5%	2.4%
<b>Employment Status</b>	Employed for Wages	1%	0.8%	1.4%
	Self-employed	1%	0.8%	1.8%
	Unemployed	2%	1.2%	3.0%
	Homemaker	4%	2.0%	8.4%
	Student	0.4%	0.1%	1.4%
	Retired	6%	5.6%	7.5%
	Unable to Work	12%	9.0%	16.2%
<b>Marital Status</b>	Married/Unmarried Couple	2%	2.0%	2.8%
	Divorced/Separated	4%	2.9%	4.8%
	Widowed	9%	7.0%	11.4%
	Never Married	1%	0.8%	1.9%
<b>Home Ownership Status</b>	Own Home	3%	2.3%	3.1%
	Rent Home	3%	2.3%	3.8%
<b>Children Status</b>	Children in Household (Ages 18-44)	1%	0.5%	1.3%
	No Children in Household (Ages 18-44)	0.5%	0.3%	0.8%
<b>Phone Status</b>	Landline	4%	3.6%	4.7%
	Cell Phone	2%	1.9%	2.6%
<b>Pregnancy Status</b>	Pregnant (Ages 18-44)	0.2%	0.1%	0.6%
	Not Pregnant (Ages 18-44)	1%	0.4%	1.2%
<b>County</b>	Minnehaha	2%	1.4%	2.4%
	Pennington	3%	2.3%	3.8%
	Lincoln	3%	1.5%	6.2%
	Brown	3%	2.1%	3.7%
	Brookings	2%	1.5%	2.8%
	Codington	3%	2.5%	4.2%
	Meade	2%	1.7%	2.9%

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2017-2021



## **Demographics**

<b>Gender</b>	The prevalence of a previous stroke does not seem to differ by gender.
<b>Age</b>	The prevalence of a previous stroke increases as age increases. This includes a significant increase as the 70s are reached.
<b>Race/ Ethnicity</b>	American Indians demonstrate a very high prevalence of a previous stroke, while American Indian/whites show a very low prevalence.
<b>Household Income</b>	The prevalence of a previous stroke decreases as household income increases. This includes a significant decrease as the \$35,000-\$74,999 household income level is reached.
<b>Education</b>	The prevalence of a previous stroke decreases as education levels increase.
<b>Employment</b>	Those who are unable to work demonstrate a very high prevalence of a previous stroke, while those who are employed for wages, self-employed, unemployed, or a student show a very low prevalence.
<b>Marital Status</b>	Those who are widowed exhibit a very high prevalence of a previous stroke while those who have never been married show a very low prevalence.
<b>Home Ownership</b>	The prevalence of a previous stroke does not seem to differ based on home ownership status.
<b>Children Status</b>	The prevalence of a previous stroke among adults does not seem to differ based on the presence of children in the household.
<b>Phone Status</b>	Those who primarily use a landline phone show a significantly higher prevalence of a previous stroke than those who primarily use a cell phone.
<b>Pregnancy Status</b>	The prevalence of a previous stroke does not seem to differ based on pregnancy status.
<b>County</b>	Residents of Codington county demonstrate a very high prevalence of a previous stroke, while residents of Minnehaha county show a very low prevalence.